UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|---|---|---|---|
| 10/590,269 | 08/22/2006 | Tadao Kyomoto | 1152-0328PUS1 | 6070 |

2292 7590 05/07/2010
BIRCH STEWART KOLASCH & BIRCH
PO BOX 747
FALLS CHURCH, VA 22040-0747

| EXAMINER | |
|---|---|
| BOWMAN, MARY ELLEN | |

| ART UNIT | PAPER NUMBER |
|---|---|
| 2879 | |

| NOTIFICATION DATE | DELIVERY MODE |
|---|---|
| 05/07/2010 | ELECTRONIC |

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

## DETAILED ACTION

### *Response to Arguments*

Applicant's arguments filed April 6, 2010 have been fully considered but they are not persuasive. Applicant's first argument that the coupling member of Beulow is not properly modified by the secondary references, Tsuchida and Teruaki, is moot because Examiner does not rely upon Beulow for a teaching of the coupling member (12). Examiner relies upon Beulow for a teaching of the light bulb and the circular rear reflector that provides a means for heat transfer. Examiner does not assert that one of ordinary skill in the art would be motivated to modify the coupling member (12) of Beulow with the reflectors taught by Tsuchida. Examiner only asserts that one of ordinary skill in the art would be motivated to utilize the lamp structure and rear reflector/heat transfer portion of Beulow in conjunction with the reflector system taught by Tsuchida, in order to achieve both the light condensation for imaging purposes taught by Tsuchida, as well as the heat dissipation benefits taught by Beulow.

Applicant's argument that it would not have been obvious to employ only the lens (12) taught by Teruaki without the remaining components of the lens system is not persuasive. Teruaki teaches that lens (12) is placed within the reflector system in order to ensure that light not condensed by the reflector is condensed, thereby increasing efficiency of the light. Tsuchida also teaches a system of two reflectors in order to condense light to a single spot outside of the reflectors. It would have been obvious to one of ordinary skill in the art at the time the invention was made to improve Tsuchida by employing the lens taught by Teruaki in order to condense more of the light emitted from the second reflector and therefore improve the efficiency of the lamp.

Applicant's next argument, that PAR, mentioned in Beulow, does not require the reflector (15) to be comprised of metal, is not persuasive. Col 2, lines 50-52 of Beulow mention that Figure 1 may be any of several well known types of lamps. Further, col 1, lines 48-50 teach that one type of discharge source is a PAR30 lamp. Therefore, one of ordinary skill in the art would have considered that the reflector (15) shown in Figure 1 of Beulow could have been comprised of aluminum, as required by PAR lamps. Further, Applicant is directed to wikipedia.org for an example of the well known definition of PAR, i.e., parabolic aluminum reflector. It is well known to those of ordinary skill in the art that PAR stands for parabolic aluminum reflector. Therefore, based on the teaching of Beulow, it would have been well known to one of ordinary skill in the art that reflector (15) would have been metal (aluminum).

Applicant's final argument that Beulow fails to demonstrate the association between reflector (15) and the bulbous portion of the lamp or the sealed ends is not persuasive. Figure 1A, as shown below, demonstrates that the reflector (15) labeled 11a is in direct contact with the sealed portions of the bulb (11b) (and therefor in direct contact with the bulbous portion as well. Direct contact facilitates heat transfer as required by claim 1. Therefore, the rejection is maintained.

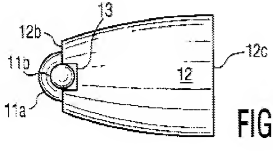


FIG. 1A

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MARY ELLEN BOWMAN whose telephone number is (571) 270-5383. The examiner can normally be reached on Monday-Thursday, 8:00 a.m.-6:30 p.m. EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nimesh Patel can be reached on (571) 272-2457. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/M. B./
Examiner, Art Unit 2879

/NIMESHKUMAR D. PATEL/
Supervisory Patent Examiner, Art Unit 2879